WHAT IS CLAIMED IS:

1. An image processing apparatus for converting first image data of a first resolution N to second image data of a second resolution M, which is lower than the first resolution N, so as to output the second image data, the apparatus comprising:

a processing unit for determining the position of a target pixel in the first image data in accordance with the ratio of the second resolution M to the first resolution N,

wherein the processing unit uses the position of the target pixel to provide a predetermined area, and the processing unit outputs a plurality of pixel values based on values of pixels in the predetermined area;

a selection signal generating unit for generating a selection signal in accordance with a value of the target pixel and an attribute signal representing the attribute of the target pixel; and

an output unit for selecting one of the plurality of pixel values generated by the processing unit by using the selection signal so as to output the selected value as the second image data.

2. An image processing apparatus according to Claim 1, wherein the plurality of pixel values include a first pixel

value obtained by detecting a maximum pixel value in the predetermined area, a second pixel value obtained by performing a product-sum operation by using each of the pixels in the predetermined area, and a third pixel value corresponding to the value of the target pixel.

3. An image processing apparatus according to Claim 2, wherein, in the product-sum operation, a plurality of product-sum operation values are output by using a plurality of masks, each mask having an arbitrary weighting coefficient.

4. An image processing apparatus according to Claim 2, wherein the predetermined area comprises a plurality of predetermined areas of different sizes, and a maximum pixel value is detected in each of the areas.

5. An image processing apparatus according to Claim 1, further comprising an attribute signal converting unit, wherein the attribute signal used for generating the selection signal is obtained by converting an input attribute signal of the first resolution N to the second resolution M.

6. An image processing apparatus according to Claim 5,

wherein the attribute signal converting unit converts the
input attribute signal of the first resolution N to a signal
of a resolution between the first resolution N and the
second resolution M, and then converts the signal to the
attribute signal of the second resolution M.

7.   An image processing apparatus according to Claim 5,
further comprising an area determining unit for determining
one of a plurality of areas based on the attribute signal of
the second resolution M, wherein the area determining unit
selects one of the plurality of areas, determines the
position of a pixel having a maximum value in the selected
area based on predetermined precedence, and outputs the sum
of pixel values in the selected area.

8.   An image processing apparatus according to Claim 7,
further comprising:
     a minor image signal generating unit for detecting a
minor image in the area and generating a signal determining
the presence/absence of the minor image; and
     an attribute signal selecting unit for selecting the
attribute signal of the first resolution M at an arbitrary
position in accordance with information of the determined
pixel position in the area.

9.　An image processing apparatus according to Claim 8, further comprising a unit for generating the attribute signal used in the selection signal generating unit based on a coupled value of the sum of pixel values in the area selected by the area determining unit and the value of the minor image signal.

10.　An image processing apparatus for converting first image data of a first resolution N to second image data of a second resolution M, which is lower than the first resolution N, so as to output the second image data, the apparatus comprising:

a processing unit for determining the position of a target pixel in the first image data in accordance with the ratio of the second resolution M to the first resolution N, and generating and outputting a plurality of pixel values based on values of pixels in a predetermined area defined by the target pixel;

a selection signal generating unit for generating a selection signal in accordance with the value of the target pixel and an attribute signal representing the attribute of the target pixel; and

an output unit for selecting one of the plurality of pixel values generated by the processing unit by using the selection signal so as to output the selected value as the

second image data,

wherein selection of the plurality of pixel values generated by the processing unit is switched in accordance with the value of the attribute signal indicating the presence/absence of a minor image in the predetermined area.

11. An image processing apparatus according to Claim 10, wherein, when the value of the attribute signal indicates the presence of the minor image in the predetermined area, a pixel value selected by the selection signal is the value of the target pixel.

12. An image processing method for converting first image data of a first resolution N to second image data of a second resolution M, which is lower than the first resolution N, so as to output the second image data, the method comprising:

a processing step of determining the position of a target pixel in the first image data in accordance with the ratio of the second resolution M to the first resolution N, wherein the processing step uses the position of the target pixel to provide a predetermined area, and the processing unit outputs a plurality of pixel values based on values of pixels in the predetermined area;

a selection signal generating step of generating a

selection signal in accordance with a value of the target pixel and an attribute signal representing the attribute of the target pixel; and

an output step of selecting one of the plurality of pixel values generated in the processing step by using the selection signal so as to output the selected value as the second image data.

13. An image processing method according to Claim 12, wherein the plurality of pixel values include a first pixel value obtained by detecting a maximum pixel value in the predetermined area, a second pixel value obtained by performing a product-sum operation by using each of the pixels in the predetermined area, and a third pixel value corresponding to the value of the target pixel.

14. An image processing method according to Claim 13, wherein, in the product-sum operation, a plurality of product-sum operation values are output by using a plurality of masks, each mask having an arbitrary weighting coefficient.

15. An image processing method according to Claim 13, wherein the predetermined area comprises a plurality of predetermined areas of different sizes, and a maximum pixel

value is detected in each of the areas.

16. An image processing method according to Claim 12, further comprising an attribute signal converting step, wherein the attribute signal used for generating the selection signal in the selection signal generating step is obtained by converting an input attribute signal of the first resolution N to the second resolution M in the attribute signal converting step.

17. An image processing method according to Claim 16, wherein, in the attribute signal converting step, the input attribute signal of the first resolution N is converted to a signal of a resolution between the first resolution N and the second resolution M, and is then converted to the attribute signal of the second resolution M.

18. An image processing method according to Claim 16, further comprising an area determining step of determining one of a plurality of areas based on the attribute signal of the second resolution M, wherein, in the area determining step, one of the plurality of areas is selected, the position of a pixel having a maximum value in the selected area is determined based on predetermined precedence, and the sum of pixel values in the selected area is output.

19. An image processing method according to Claim 18, further comprising:

a minor image signal generating step of detecting a minor image in the area and generating a signal determining the presence/absence of the minor image; and

an attribute signal selecting step of selecting the attribute signal of the first resolution M at an arbitrary position in accordance with information of the determined pixel position in the area.

20. An image processing method according to Claim 19, further comprising a step of generating the attribute signal used in the selection signal generating step based on a coupled value of the sum of pixel values in the area selected in the area determining step and the value of the minor image signal.

21. An image processing method for converting first image data of a first resolution N to second image data of a second resolution M, which is lower than the first resolution N, so as to output the second image data, the method comprising:

a processing step of determining the position of a target pixel in the first image data in accordance with the

ratio of the second resolution M to the first resolution N, and generating and outputting a plurality of pixel values based on values of pixels in a predetermined area defined by the target pixel;

a selection signal generating step of generating a selection signal in accordance with the value of the target pixel and an attribute signal representing the attribute of the target pixel; and

an output step of selecting one of the plurality of pixel values generated in the processing step by using the selection signal so as to output the selected value as the second image data,

wherein selection of the plurality of pixel values generated in the processing step is switched in accordance with the value of the attribute signal indicating the presence/absence of a minor image in the predetermined area.

22. An image processing method according to Claim 21, wherein, when the value of the attribute signal indicates the presence of the minor image in the predetermined area, a pixel value selected by the selection signal is the value of the target pixel.

23. An image processing circuitry for outputting image data having a first resolution on an image device having a

second resolution, by appropriate selection of a target
pixel in the first image data to permit image data to be
output at the second resolution, the processing circuitry
comprising:

memory circuitry; and

processing circuitry for outputting a plurality of
pixel values including a first and a second pixel value for
selection as output image data with the second resolution,

wherein the first pixel value corresponds to the value
of the target pixel, and

wherein the second pixel value corresponds to a result
of a product-sum operation performed using both the target
pixel and another pixel selected from the first image data.

24. The image processing circuitry of Claim 23,
wherein the product-sum operation includes use of different
weighting coefficients for each of the target pixel and the
selected pixel value of the first image data.